## **eMOLT**

# Winter 2010-11 Update

#### 10-year Anniversary "Get Together" 3 March 2011

We hope you can join us on the opening day of the 2011 Maine Fishermen Forum in Rockport Maine. We have a line up of lobster-related talks that morning followed by eMOLT presentations that afternoon. We are offering lunch, the seafood reception ticket, and Thursday-night's lodging to all our active participants and guest in appreciation of all their voluntary data-collection activities over the years. Similar to the event we had at the 5-year mark, we see this as an opportunity for participants from the various lobstermen associations to get together, discuss their observations, and see the results of their efforts. We hope that many of our Southern New England participants can make the trip north and perhaps experience the forum for the first time. If you are interested in taking part in this event, please email or call <a href="mailto:event.geomlf.org">event.geomlf.org</a> at 207-985-8088 to reserve your place. There are a limited amount of "balcony rooms" at the Tradewinds Motor Inn for those who call us early. We couldn't afford to stay at the Samoset Resort (where the actual conference is held) but we hope you and your guest will appreciate this working waterfront location in downtown Rockland.

#### What to do with the "Current Meter"

Many of you are probably wondering what to do with the instrument we sent you in the mail a few months ago. Whether you had a chance to put it in the water or not, we ask that you return it in the mail. If you no longer have the bubble envelope that it was sent in, you can either use one of the \$5 flat-rate US mail boxes available now at all post-offices or ask me to send you one of these prepaid boxes by emailing james.manning@noaa.gov. The sensors were programmed to collect data until 30 November 2010 at which point their internal memory is full. Those that have been returned thus far have provided some very interesting data (see below). We will be reinitializing the instruments and prepare them for another deployment in 2011. We will have some available and ready-to-deploy at the annual forums so, if you would like to deploy one in 2011, let us know. We can hand you one then.

#### Reminder to mail in your temperature probes

When you are done fishing for the year and you are mailing in the current meter, don't forget to include your temperature probe. The temperature records that have come back so far this year have documented 2010 as being one of the warmest of this first eMOLT decade. There were also a few interesting events that affected the time series of temperature such as the 3-day northeaster that happened in late August. Don't forget to make note of your deployment location and depth.

## "Realtime" temperature probes mailed to a few participants

Elliott Thomas and John Melquist are the first participants to request and try the new "realtime" temperature probe. While this instrument does not transmit to a satellite as we had originally proposed, it can send its data wirelessly to the wheelhouse. With a push of a button, the information can be transferred to a base station or directly to a PC. Since the base station cost several hundred \$ and the special probes cost nearly double the standard probe, the extra functionality is not worth supplying all participants but we continue to experiment and look for the latest low-cost technology.

#### Drifters in 2010 and plans for 2011

Over 117,000 kilometers (~63,000 miles) of ocean were logged by our 248 drifters in 2010, more than any other year. Several of the units that were deployed in mid-summer in the Gulf of Mexico are now in the North Atlantic. A few of them are still reporting today between Bermuda and the Grand Banks. You can see both the details and the summaries of these tracks at <a href="http://www.nefsc.noaa.gov/drifter">http://www.nefsc.noaa.gov/drifter</a>. While our proposal to NOAA's Environmental Literacy Grants was not accepted, we still plan to follow through with our plan to engage many more schools in the making and tracking of these instruments in 2011. We have been invited to make a presentation at the National Marine Educators Annual Conference in Boston this July. While there are already a few dozen schools deploying our drifters, this conference will expose them to many more educators around the country.

### Plans to expand our geographic range

A few opportunities have arisen in recent months that MAY allow us to expand our operation to both the north and south. We are proposing to the Southern New England Collaborative Fisheries Initiative to engage the Rhode Island Lobstermen Association. They would be asked to deploy temperature probes, current meters, and drifters in Buzzards Bay, Block Island Sound, and perhaps as far south and west as Long Island Sound. This may allow us entry into the Mid-Atlantic Regional Coastal Ocean Observing System (MARACOOS) in the future in the same way we hope to become permanently involved with the Northeast Region (NERACOOS). We have also restarted discussions with our neighbors to the north, Nova Scotia's Fishermen Scientist Research Society (FSRS). They hope to expand their operation to year-round deployments and to formalize our collaboration in some way.

#### Current meter results thus far

As of this writing in late November 2010, three current meters have already been returned. It appears this new prototype worked well. In Pat White's case, a few weeks of bottom current were recorded at a ten minute sample rate including a few cases where large storm waves apparently flipped the trap for short periods. In Billy Souza's case (see figure below), the healthy tides on the back side of Cape Cod were recorded at approximately 25 cm/s (~½ knot).

